METHOD OF CORRECTION OF THE ERROR INTRODUCED BY A MULTIBIT DAC INCORPORATED IN AN ADC

ABSTRACT

5   A method corrects the error in an output digital signal (Out) of an analog/digital converter (ADC) (100), in which the error is introduced by a multibit digital/analog converter (DAC) (125) incorporated in the ADC. The method calculates (905) coefficients (p_i,$p_i r_i$) of a linear combination of vectors of a vector space representative of the error introduced by the DAC;

10   calculates (910-1,..., 910-7) the correlation of a signal (Res1d) containing the error introduced by the DAC, to extract an estimation of each vector; calculates a linear combination representative of the estimation of the error introduced by the DAC, and uses the estimation of the error introduced by the DAC to correct the ADC output signal.